

WHAT IS CLAIMED IS:

1. An optical disk device for recording a signal to and/or replaying a signal from an optical disk, the optical disk device comprising:

a head, including an actuator that supports and moves an objective lens at least in a direction of tracking, for writing the signal onto the optical disk and/or reading the signal from the optical disk by directing a laser beam to the optical disk through the objective lens;

a slider for transporting the head in the direction of tracking;

an acceleration sensor for detecting and outputting a static acceleration acting on the objective lens in response to a change in the posture of the optical disk device; and

a slider controller for driving the slider so that the objective lens is aligned with the center of an optical field of view of the head, based on a detection signal from the acceleration sensor and a low-frequency component of a tracking servo signal for causing the objective lens to track.

2. An optical disk device according to claim 1, wherein the acceleration sensor outputs a positive signal in response to an acceleration acting in one of a radially

inward direction and a radially outward direction across the optical disk in the tracking operation of the objective lens, while outputting a negative signal in response to an acceleration acting in the other of the radially inward direction and the radially outwardly direction across the optical disk.

3. An optical disk device according to claim 1, wherein the slider controller further comprises a gain adjusting circuit that provides a predetermined gain to the signal from the acceleration sensor so that a signal corresponding to the detection signal output from the acceleration sensor is added to the low-frequency component of the tracking servo signal.

4. An optical disk device according to claim 1, wherein the acceleration sensor detects the acceleration of gravity taking place in the direction of movement of the head in a seek operation thereof, and wherein the slider controller varies the level of a drive signal for driving the slider in response to the acceleration of gravity.

5. An optical disk device according to claim 1, wherein a track jump pulse is varied in response to the level of the detection signal from the acceleration sensor

during a track jump operation of the objective lens.

6. A slider control method for controlling an optical disk device for recording a signal to and/or replaying a signal from an optical disk, the optical disk device including a head including an actuator that supports and moves an objective lens at least in a direction of tracking, for writing the signal onto the optical disk and/or reading the signal from the optical disk by directing a laser beam to the optical disk through the objective lens, and a slider for transporting the head in the direction of tracking, the control method comprising the steps of:

detecting a static acceleration acting on the objective lens in response to a change in the posture of the optical disk device; and

driving the slider so that the objective lens is aligned with the center of an optical field of view of the head, based on the detected signal and a low-frequency component of a tracking servo signal for causing the objective lens to track.